**DISCUSSANT COMMENTS – Gary Fowlie**
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**Expert Group Meeting on the Post-2015 Development Agenda**

**1) Why are Science and Technology crucial to a post-2015 UN development agenda?**

Science and Technology has always been crucial to the development agenda. The problem is that it remains relatively ignored by development practioneers? This is a combination of ignorance at worst and benign neglect at best. As for those of us who represent the Scientific and Technical community, we are equally guilty of failing to make the connection between the technical and scientific areas in which we have proficiencies and the social and economic policy areas where we don't, but upon which our work has great impact.

I would use as an example the UN Development Assistance Frameworks (UNDAF). Despite the direct impact the information and communication technology industry has had on investment levels and GDP growth in the developing world – not to mention its impact on improving the efficiency of delivering the essentials of development – be they energy, water, health or education – there is no UNDAF that addresses information and communication technology for development.

And here's why there should be:

Broadband technology is the most important enabling technology we've seen for a generation (since the advent of the Internet).

- for every 10% increase in the number of broadband connections in low and middle income countries economic growth increases by 1.4%. This is more than in higher income countries and more than any other telecommunication service.

- a 10% increase in broadband household penetration delivers a boost to a country's GDP in the ranges from .1 to 1.4%

- for every 1,000 broadband connections established 80 new jobs are created

This impact is greatest in the developing world.

I would also use the example of technology transfer? Development practitioner's sometime talk about technology transfer as if it were simply a matter of government policy directives and that 'technology' were a package of bits and bytes that can be picked up and delivered where needed. In fact, technology transfer, and I will speak about information and communication technology only – depends almost entirely on the creation of a regulatory framework by governments that will encourage, support and sometimes subsidize **private** investment.

We haven't heard much about the role of the private sector in the past 2 days but let me give you an example. I will compare the impact that ICTs have had in two African countries – Ghana and the Democratic Republic of Congo.

Ghana implemented regulatory reforms that allowed for open and transparent bidding on the licences to the frequency spectrum, spectrum which it has UN treaty rights to access. Spectrum, which is the lifeblood of every Smartphone, tablet and computer in this room and WiFi which isn't in this room right now ☺. This open, transparent and competitive bidding process gave the private sector the confidence to invest millions of dollars for licenses and the assurance that its investment wouldn't end up in some ones back pocket. The Gov't of Ghana also insisted on putting conditions on that licensing agreement that would require the service providers to extend connectivity to rural areas and schools and urban health centres. The result has been dramatic, the economic impact has been immense and it continues to stimulate innovation and other investment. Connectivity costs are dropping and while they may still be higher on average than in the developed world, the demand for ICT services grows exponentially.

The opposite case is the Democratic Republic of Congo. Not only does the DRC rank amongst the lowest in terms of connectivity to the global information society, but over the past 3 years it has increased the tax on the sale of mobile phones by more than 2000%. And the tax that it imposes is a luxury tax.

Access to ICTs is not a luxury. Although it's taken for granted in the developed world and I expect by most of you in this room – the Least Developed Countries last May recognized ICT Networks in the Istanbul Plan of Action as essential Infrastructure on par with water, transportation and energy.

I think the DRC also provides a good example of the disconnect between science and technology and development policies, which I mentioned earlier. I don't believe it's coincidental that the systematic sexual assaults that have occurred in the thousands in the DRC are happening primarily in the area where there is no connectivity at all. Cries for help went unheard.

Also let's reflect on Tunisia and the Arab Spring for a second. ICTs didn't create the revolution, but they enabled Tunisians to pull back the smokescreen that 'all was well' and allowed them to share their frustrations, mobilize and exercise their basic human rights.

**How could this be included in a post-2015 UN development agenda?  And should there be a specific goal for it?**

There is no need to wait until 2015 – we need a UN Development Assistance Framework that addresses ICT for Development now.

Not to mention, that there are already specific goals on the books

First, the Least Developed Countries in the Istanbul Plan of Action not only put ICT Networks on an equal footing with energy, power and transportation but they have called for 100% access to the Internet by the year 2020.

The Broadband Commission for Digital Development – an ITU/ UNESCO commission of global leaders isn't waiting for post-2015 either.  It's called for Member States:
- to have national broadband policy plans in place by 2015
- to make Broadband affordable (less than 5% of monthly income) by 2015
- to connect homes to broadband (40% of households in developing countries should have internet access by 2015)
- for getting people online – Internet user penetration should reach 60% worldwide, 50% in developing countries and 15% in LDCs by 2015

As well, there is a mandatory 10-year review of the outcomes of the World Summit on the Information Society called for by the General Assembly, which will once again bring the increasingly important issues of the information society, such as ICT for Development and Cybersecurity, to the fore.

Put together, I think there is a strong case for ICT targets in the Post-2015 development agenda.

**Should it be a conditioning factor?**
Of course there are conditions attached…regulatory reform in the licensing of frequency spectrum in the most essential and most basic.

The need for good and responsible governance is of course essential for successful private-public partnerships.

And we need a willingness by development practitioners to develop a more scientific approach to the post-2015 development agenda. Although from the tone of the discussions these past few days, this would seem to be a foregone conclusion.

And finally we need to renew our respect for Article 19 – this is the Article in the Universal Declaration of Human Rights and Freedoms that says we all have the right to hold and express opinions across ALL frontiers and ALL media.  Science and Technology has always been at the forefront of testing our commitment to this article. But no more so than in the past 18 months when the Arab Spring and the information revolution that enabled it proved once again that science and technology is the most fundamental catalyst for peace, human rights and development.